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STORIES OF THE IRISH PEASANTRY.

BY MRS S. C. HALL.

"IT'S ONLY A BIT OF A STRETCH!"

"AND were there many at the race, Pierce?"

"Many, is it many, aunt? Faith, I believe ye; thousands upon thousands!"

"And did many horses run, Pierce?"

"Ay, hundreds!"

"Oh, Pierce, how could that be?—there would not be room; and, besides, I'm astonished at the people's coming out in the teams of rain."

"Och, aunt, ye're such a bother! Warn't there hundreds of tents to shelter them?"

"Is it to shelter *thousands*, Pierce?" said his aunt Kitty, laying down her knitting, and looking with her pale blue eyes steadfastly in his face.

"Lord! aunt, how can you go on believing every word a fellow says?"

"That's true, my dear, when *you* are 'the fellow,'" answered aunt Kitty in her usual placid way.

"Sure," he continued, "there were plenty of people on the race-course, and that's all as one as thousands; and there were plenty of horses, and a good sprinkling of tents; but, aunt, you drive all the spirit out of a man with your regulation questions. I tell you, you drive all the spirit out of me."

"Then I do very wrong," replied aunt Kitty, smiling. "I only want to exchange spirits—the spirit of truth for the spirit of falsehood."

"Falsehood, aunt!"

"Lying—whether black or white—if it pleases you better."

"By the powers!—and they're a large family—I wouldn't let a man say that of me."

"You could not prevent his thinking it."

"No man should dare tell me I was a liar!"

"I dare say not, Mr Pierce Scanlan. You quarrelled last week with Miles Pendergast for repeating, as if it had been truth, what you *afterwards* said was a jest, and then you quarrelled with him for saying that something else was falsehood which you wished to be understood was truth. You said on both occasions you'd blow his brains out; but you have stated your intention of doing so towards so many, that I suppose my friend Miles still has his brains. I hope he will keep them cool."

"I wish," exclaimed the young farmer, "I wish my mother had been any thing but an English woman."

"Why, Pierce?"

"Why, because then I should not have had an English aunt to fuss about nothing. Now, don't look angry; no, not angry; you never look angry, that's the d—l of it—Nor don't blow me up—but no, that's as bad, you never blow me up; if you did, there would be some comfort in it, but you wont do either. You wont do any thing but reason with me—it is really enough to make a fellow mad!"

"To be reasoned with?"

"Ay, to be reasoned with. My father used to say it was one of the privileges of an Irish husband, that he was never expected to listen to reason."

"Irish husbands," said aunt Kitty very solemnly, while preparing to take up a stitch she had just dropped, "are, generally speaking, great tyrants; they have the most tender affectionate wives in the world, and they bluster their lives out. Storm!—storm!—fly!—fly!—and then (as was the case with my poor sister) when the trembling spirit has found refuge in the grave, they cry over her! Irish fathers are bad fathers!"

"Oh, Kitty, Kitty, if you warn't my aunt!"

"But I *am* your aunt. I left my home and my country, when the Almighty took your parents, to share what I had with my sister's children. All I want is for you to *hear* me."

"Aunt, you want us to *heed* you too."

"Not unless your reason is convinced, Pierce."

"Bother the reason, aunt! I want to have no call to it; and I hope you wont be coming over what you said just now to Eliza Byrne about Irish husbands."

"Irish husbands are generally bad, and Irish fathers are even worse."

"Oh, aunt, why, their *love* for their children goes beyond every thing."

"And their care for their comfort and prosperity amounts to nothing. Peer and peasant live up to what they have, and leave their children the Irish heritage of beggary. How did your own father leave you and your three little sisters? It breaks my heart when I think of it! You're a good boy, Pierce; a kind-hearted boy, if you'd give up *stretching*; only stick to the truth, the bright ornament, Pierce. I do think if you would, you'd be almost as good a husband as an Englishman, as wise a one as a Scotch."

"Will you say that to Eliza Byrne, aunt? Do, aunt, like a darling, and I wont *give a stretch* for a week!"

"Talking of Eliza Byrne," said his kind, but peculiar aunt Kitty, "now I think of it, Eliza heard something you had said of Lucy Flynn that has cut her up very much."

"Of Lucy Flynn?"

"Yes; either of Lucy or to Lucy, I am not sure which, so do not run away my story *into a stretch*. And, Pierce, what did you mean by saying that Brady owed Garrett more gold than his mare could carry, and that he'd be broke horse and foot if he could not pay."

"Oh, by the powers," replied Pierce, colouring deeply, "I never said such a word, not that I remember; or, if I did, *'twas only a bit of a stretch*, just to taze old Mother Brady, that thought to haul me over the coals about a bit of fun concerning her son and Ellen Graves. I meant no harm at the time. Any how, he does owe Brady a matter of ten pounds."

"*Is that more than his mare could carry?*"

"Oh, aunt Kitty, be easy; you're too bad entirely; faith, the town land's turning English upon us, observing every *stretch* a boy makes for divarsion."

"There is plenty of diversion on the subject, I assure you," said his aunt. "Every lie in the parish *is called a Pierce Scanlan*."

"By the powers!" he exclaimed, "any man that says that, I'll break every bone in his body."

"Wouldn't it be easier to break yourself of the habit of *stretching*, as you call it?" inquired his aunt.

"Bad cess to the people that can't see a joke, and ye're enough, aunt, so you are, to set a body mad."

The interview had proceeded to this particular point, when Pierce's sisters Jane and Anne and little Mary entered together; they had taken a half holiday, and crossed the hill to spend it at Eliza Byrne's, and now returned, not laughing and talking as usual, but with sober steady countenances, and quiet footsteps. Each entered without speaking, and there were traces of tears on little Mary's cheeks.

"Holloa, girls!" exclaimed their really good-tempered brother, "have you been to a funeral?"

"Be easy with yer nonsense," said Jane.

"Too much of one thing is good for nothing," muttered Anne.

"I wonder at you, so I do, brother Pierce, to say what you did of Eliza Byrne," added little Mary.

"And your life isn't safe in the country, I can tell you," recommenced Jane; "for every one of the Brady's people are up as high as the Hill of Howth."

"And will have you as low down as the towers in Lough Neagh," added Anne.

"And Ellen Graves's father has been all the way to Newtownmountchallagharshane, to see 'torney Driscoll, to take the law of you for taking away his daughter's character."

"Easy, girls, for the love of the holy saints!—easy, I say," said Pierce, looking, as well he might, bewildered; "you open upon me for all the world like a pack of hounds. Easy—one at a time!" exclaimed the brother; "*easy with the hay, avourneens, and insense* me into it—quietly."

"Quietly!" repeated little Mary, who was the pet and the beauty of the family; "it's mighty easy to *say* quiet to the waves of the sea, and the storm whirling them about."

"A joke's a joke," said Jane; "but what right had ye to touch the girl's character?"

"And crying up Lucy Flynn before Eliza Byrne's brother's face. *She'll* have nothing more to say to you, I can tell you that," continued Anne.

"And meddling with the Bradys—the *quarrelsomest* people in the five parishes; we'll have the house burned over our heads through you," sobbed little Mary.

"And be brought before judge and jury, if that 'torney Driscoll smells out the yellow guineas Ellen Graves's father keeps hid in the ould stocking in the thatch of his house; and oh! on the race ground—I forgot that—how could you say the councillor's *colt* Conn was all head and tail like his owner? The councillor will be down on ye, ye misfortunate boy, as well as the 'torney!" said Jane.

"And that's not the worst of it; but, oh, Pierce, the *stretch* you made ——"

"Whisht, Anne," interrupted Mary; "what was it all to compare to little Matty O'Hay's turning up his nose when I said my aunt could fine-plait better than the lady's maid at the castle; he turns up and round his ugly nose, that looks for all the world like a stray root of mangold-wortzel, and says 'he supposes *that* must be put down as another *Pierce Scanlan*.'"

"Did he say that?" exclaimed Pierce, jumping upwards to where three or four exceedingly well-looking, well-organised shillalas were "seasoning"—up the chimney; and bringing down his favourite at a spring, he weighed it carefully in his hand.

There is something particularly national and characteristic in the manner of an Irishman's weighing a shillala; the grasp he gives it is at once firm and tender; he poises it on his open palm, glancing his eye along its fair proportions; then his hand gently undulates; again he regards it with a look of intense and friendly admiration, grasps his fingers round it, so as to assure himself of its solidity, until the knuckles of his muscular hand become white, and the veins purple; then in an ecstacy of enjoyment he cuts a caper; and while his eyes sparkle, and a deep and glowing crimson colours his cheeks, he wheels his national weapon round his head, and the wild "whoop!" of the wild Irish rings through the air. So did Pierce, and "the whoop," intended as a sort of war-cry to the faction of the O'Hays, compelled his aunt Kitty to speak.

"My dear," said the good quiet English soul, fairly letting her knitting drop, and placing her fingers on her ears, "my dear Pierce, put down that dirty stick; don't make such a noise, but sit down, and *listen to reason!*" Now, let any one, understanding what an Irishman is in a state of excitement, imagine how Pierce received this well-intended but ill-timed admonition. Never had he been so badgered before; for a moment the stick was poised above his head, as if the good woman had been a sorceress, and had fixed it there; and then, uttering a deep oath, he rushed towards the door with something like a determination of cracking the pate of the first man he met, merely to get his hand in practice for what was to come. It is not, however, easy for a man to escape from four women, and they hung round him with such a tenacity of grasp, that he was literally dragged to "the settle."

"Now, my dear Pierce," said his aunt, when the cries and "ah, do's" and "ah, don't's" of the sisters had subsided, "will you listen to reason?"

"No!" roared Pierce, with the voice of a Stentor.

"Ah, do, aunty Kitty, let him alone for a minute or two," whispered little Mary; "it's no use now, and

he foaming mad alive with the passion; let him come to a bit; or put," she added, judiciously, "an ould crock or something in his way for him to break: that always *softens* his temper."

Now, though aunt Kitty saw little Mary was right in both cases, she loved her "crocks" too well to attend to the second admonition. She could not help thinking very truly what an immensity of harm is done by the *gossip* and mean kind of wit which springs from falsehood; like the weeds growing upon rank and unwholesome soil, their fruit is poison; the innocent and playful mirth sparkling in the sunbeams of a warm imagination, and both giving and receiving pleasure, is healthful and inspiring; but in Ireland all classes are more or less cursed with a spirit of exaggeration, that, to my sobered senses, is nothing more nor less than unredeemable falsehood; there are a number of persons who have many good qualities, but I cannot respect them; they are perpetually lying. If they have walked a mile, they will tell you they have walked six; and if there is a crowd, it is magnified into thousands, like poor Pierce's people on the race-course. You must be, like Michael Cassio, "a good arithmetician," to *deduct* the item of truth from the million of falsehood. If you believe them, they are rude enough to laugh at you; and if you do *not* believe them, they are inclined to quarrel with you. Although I have in this instance made exaggeration a *peasant-failing*, I think the middle class are the most addicted to the vice of what I must call by its own vulgar name, "*humbugging*"—saying what is not true, that they may have the pleasure of laughing at those who do them the injustice to believe they have spoken *truth*.

In England we have no understanding for this spurious wit. No country cherishes truth as it deserves to be cherished; it is a blessed and a holy thing, but we do not in England *profess* to put truth to the blush. "He's a fine gentleman," said a cousin of Pierce Scanlan's to me, when speaking of his landlord; "he's a fine gentleman; the *very light of his eyes is truth*."

To those unaccustomed to the contradictions of the Irish character, it is extraordinary, that, in a neighbourhood where eight or nine young men live, all known to belong to the *humbugging* class, any should be found weak or foolish enough to credit a word they say; and yet those very "boys" will go on telling falsehoods of each other, at which they will laugh one moment, and about which (as is Pierce Scanlan's case) they will quarrel the next. It is very painful to associate with those who never reflect, that they sacrifice the moral dignity of manhood when they desecrate the temple of truth.

Pierce Scanlan's imagination was very vivid, and he loved a laugh; he had given himself the habit of speaking without consideration; and as the jollity of the many, stifled the annoyances and pains of the few, he had gone on until even those who confessed "he meant no harm" became annoyed at his practical jokes. Eliza Byrne had loved him, but not as well as he loved her; and the match was effectually broken off, at least for a time, by her brother, who declared, after what Pierce had said of Lucy, his sister should have nothing to say to him.

Now, Pierce had said this *for a stretch*, a sort of desire to *cut a dash*, by showing that he had two strings to his bow; but Eliza's feelings were wounded, and though she had known that Pierce was a "*stretcher*," she did not seem to care for the fault, until it *reached herself*. This is the way in general—we laugh at the jest, until it cuts home!

But to return to the cottage.

Pierce, although not wrought up to the pitch of being able to reason, was brought about by his sisters to *think*, though but little time was given either for that or any other consideration, for the Brady faction had mustered strong, and, stimulated by strong drink, entered the farm-house, to the terror of his sisters, and almost the death of his aunt; and taking the law, as they are too fond of doing, in their own hands, beat the unfortunate Pierce in a way that rendered him dumb for a long time on the subject of whatever debts the Bradys might contract. He had only done it *for a stretch*; but what of that!—it had come home to the Bradys; and although one and all they were rather sorry the next day for "being so hard on Pierce, pleasant boy!" still that was but a poor salve for his aching bones and insulted pride.

Aunt Kitty undertook to talk over old Jem Graves, and Mary accompanied her aunt to prevent her "giving him too much English." I really think that Mary's bright eyes had more to do with the withdrawal of 'torney Driscoll's instructions touching "*the bit of a stretch*" which the honest old man imagined affected his daughter's fame, than all aunt Kitty's reasons. Pierce made him an earnest and ample apology, and thus prevented further trouble on that score. The councillor had taken umbrage at the licence Pierce had given to his imagination when speaking of "the colt." Words wound more deeply than swords; and long after the desire for fun had prompted the folly, the councillor remembered the foolish "jest" which Pierce had indulged in at the expense of him and his "colt," and refused Pierce a new lease of a couple of acres which he had much desired to retain, and which his father and grandfather had tilled. Aunt Kitty never could understand why it was that the Brady faction took the law into their own hands and thrashed her nephew, nor how it was that, they having so done, her nephew did not take the law of them; but this want of comprehension was set down by her Irish neighbours to the score of English stupidity. The various rumours that these disturbances gave rise to, spread all over the country, and far and near, Pierce was always reminded of his fault by, "Well, Pierce, what's the last!—have you got a new *stretcher*?" Pierce must have carried his art of exaggeration to great perfection to have attained such note in a country where the practice is so largely indulged in, but circumstances had given him peculiar celebrity, and his aunt had so far succeeded in making him "listen to reason" as to convince *his* reason that the practice was wrong. The painful part of the matter was, that when he really and truly spoke truth, no one would believe him.

Eliza Byrne more than once was on the point of relenting; but though Pierce swore over and over again that he was an altered man, every exaggeration in the parish was fathered upon him, and poor Eliza did not know what to do for the best. Her brother is certainly Pierce's enemy in the matter, and but for him I really think they would have been married. I wish it was a match, for Pierce Scanlan deserves a reward for fighting, as he has lately done—against a habit, the triumph of which is "*never to be believed!*" It may be a match! I saw them walking together the last time I was at Artfinne; Eliza listening, and Pierce, with very little exaggeration either in his look or manner, making love earnestly yet soberly; the worst symptom I perceived was, that Eliza Byrne shook her head frequently.

"Well, Pierce," I said as we passed them (they had paused for the purpose), "I hope you are weighing your words."

"Bedad! ma'am, I've been truer than standard weights and measures this many a day, but I get no thanks for it."

"But you will, Pierce, in time. The priest, the minister, and aunt Kitty, say you improve."

"I am improved," he said, somewhat proudly, "though Eliza wont believe it. Yet, I know I'm improved."

"Pierce, Pierce!" exclaimed Eliza with a very sly quiet smile, "*isn't that a bit of a stretch!*"

I think Eliza might venture.

POPULAR INFORMATION ON SCIENCE.

ON THE ORGANS OF THE HUMAN VOICE, AND ESPECIALLY ON SPEECH.

Some new and philosophical views upon the organs of the human voice, and more especially upon speech, a subject in which every one is interested, having within these few years been published in the Transactions of the Royal Society, by our eminent countryman Sir Charles Bell, we propose to present our readers with a short account of them.

We may announce the general object of the paper in the elegant language of its author: "In contemplating the extent of combination established among the parts of the human body, we become sensible of its perfection above all comparison with things artificial; and this is especially true with regard to the organs of the voice. They are remarkable for their union or co-operation in function; they all perform more than one office, and are interwoven and associated with parts which serve a double, or even a triple function. But we ought not to be surprised at the intricacy of structure in the human organs of voice, when we find them capable of imitating every sound of bird or beast, excelling all instruments of music in clearness or expression, and capable of making those infinite changes on articulate sounds, which form the languages of the different nations of the earth."

The apparatus which we so readily use in speaking, is somewhat complicated. It includes the lungs and chest, and the air-passage from the top of the lungs to the lips, including of course the mouth. The lungs and mouth need not be dwelt upon; but the air-passage must be considered as divided into three parts—the *trachea*, or windpipe proper, extending upwards from the lungs to the second part—the *larynx*, regarded generally as the more especial organ of voice, included in that protuberance at the upper part of the neck familiarly known as Adam's apple (*pomum adami*); and, third, the *pharynx*, or back mouth. A few words must be said on each of these parts.

The *trachea*, or windpipe proper, has long been described as a tube formed of imperfect little hoops of hard gristle (*cartilage*), joined by membrance at the back part, where it is more soft and flat: thus it is at once a rigid and free tube for breathing or respiration; and it yields in the act of swallowing, permitting the morsel to descend behind it. All this is perfectly correct as far as it goes; but there is a great omission. At the back part of the windpipe, exterior to the lining mucous coat, there is a fine and regular layer of muscular fibres, which run from one end of these hoops to the other. This muscle is beautifully distinct in the horse. When a portion of the trachea is removed from that animal's body, and every thing dissected off but this muscle, the cartilages are preserved in their natural position; but the moment that the muscular fibres are cut across, the cartilages fly open. This muscle, then, in man, and the highest class of animals, is opposed to the elasticity of the cartilages of the trachea; by its action it diminishes the bore or calibre of the tube, and by its relaxation the canal widens of itself. When we take in breath, the whole extent of the air-passages opens or expands, and then the trachea also is most free; but in breathing out, and especially in forcible expiration and coughing, the trachea is diminished in width. The obvious purpose of this arrangement is to clear the trachea of whatever secretions may be naturally, or whatever foreign bodies may be accidentally, in it. When the air is inspired, the trachea is wide, and the mucus is not urged downwards: when the air is expelled, the transverse muscle is in action, the calibre of the tube is diminished, the mucus occupies a larger proportion of the canal, the air is sent forth with greater force than that with which it was inhaled, and hence the gradual tendency of its contents to ascend. The same principle still more strikingly holds true when a foreign body accidentally gets into the windpipe; the larynx, and upper parts, participate in these movements; and hence unspeakable inconvenience and mischief are avoided.

The view here taken of the use of this part is strengthened by examining the tracheæ of birds. In them the cartilages are complete hoops, and there are no compressing muscles; but in them, also, the air-tubes are quite dry, and the lungs, and other air-cavities, are also free from moisture.

Another important use of the trachea, more directly considered as the organ of voice, is, that it conveys the air from the lungs to the larynx, very much as the tube or *porte-vent* does in an organ from the bellows to the reed of the organ-pipe; and it is interesting to recognise the precise part it plays in the various exercises of the voice. Our author distinctly informs us that it does not vibrate, or give out sound, and so does not interfere with, or confuse, the more especial function of the larynx. The imperfect circle formed by the many rings of the trachea, and their separation from each other, are ill suited to convey sound. Sir Charles proceeds to point out a still more peculiar provision for effecting this important object. If, says he, in inspecting a musical instrument, we should find a spongy body of the consistence of firm flesh, in contact with a chord or tube, and an apparatus by which this body might be pressed against the vibrating part, it would be concluded that it damped or limited the vibration. Now, precisely such a body is found in man, at the upper part of the trachea, known as the *thyroid gland*—that gland which, so often swelling in some countries, and sometimes in all, forms the well-known and singular disease, the *goître*. This firm glandular body is overlaid with muscles, whose action braces it to the windpipe. The tendency, therefore, even to a continued drone, from the vibration of the trachea rising above the inflections of the voice, and adding nothing to its distinctness, is anticipated, and the adjustment of the gland to the trachea is the most suitable means of suffocating or preventing the vibration from descending along the sides of the tube. The accuracy of this view is tested and confirmed by an examination of the vocal instrument in birds. Their sounding apparatus, as may be seen even externally, is at the lower extremity of the trachea, and in the chest; hence the sound must ascend along the whole trachea; and, accordingly, it is interesting to notice that there is no thyroid gland in birds, and the windpipe itself is a firm tube, with cartilages of entire circles; and, in short, there is nothing in them to suffocate the rising vibrations. In no animal is the thyroid gland of the same relative magnitude as in man.

Proceeding to the *larynx*, we find the common opinion confirmed by experiment and analogy, that the narrow slit of the larynx, the *glottis*, is the primary seat of sound—the source of the vibrations communicated to the air as it is breathed; whilst, at the same time, to consider the motions of the glottis, and even the modulations of the air in the larynx, as the sole source of sound, would be incorrect. The breath which plays inaudibly in respiration, is formed into the voice, or vocalised, when the strings of the glottis, or *chordæ vocales*, are braced so as to cause the edges of the slit to vibrate in the stream of air. In any wind instrument the air must be impelled with a force sufficient to make the sides of the tube vibrate; so, in the production of sound from the human organs, there must be a certain pressure of the column of air: but in the organs of the voice there is this superiority, that there is not only the means of regulating the pressure by the column of air, but of adjusting the vocal chords so as to suit them to the most delicate issue of the breath. The edge of the glottis is exquisitely regulated by its many muscles, and the motions of the chest by its accustomed play.

The construction of the larynx is not more complicated than it is beautiful. Five gristles, or cartilages, go to form its sides or walls. By far the largest of these gristles is that which projects forward, and is familiar to every one as Adam's apple—the *thyroid cartilage*; below, there is one shaped like a ring, and hence called the *cricoid* cartilage, from the back of which two slender ones stand up, which are very moveable, called the *arytenoid*; and, lying over the glottis, hence called the *epiglottis*, is the fifth, connected with the root of the tongue. Between the thyroid gristle on the fore part, and the arytenoid ones behind, lie the vocal chords, a lower pair, forming the chink of the true glottis, and an upper pair, somewhat higher. These ligaments do not stand distinct from the sides of the tube, but under the lining membrane, which, sinking between the two, forms the *laryngeal sac*. This little sac, or lateral cavity, has much influence on the voice; it holds the chords from the side of the tube, and gives great freedom to their vibration. Its size varies in different animals; and in those monkeys called *howlers*,

remarkable for their horrible piercing cries, it is remarkably large. Sir Charles Bell, an experienced surgeon, as well as an able anatomist, in those sad scenes he so often has been called to witness, has frequently seen these parts in motion in man, both in breathing and speaking. During inspiration the glottis is dilated, and in the vain attempt at utterance moves in correspondence with the lips.

In advancing to the *pharynx*, notwithstanding its higher importance, we come to a part of the subject which has as yet been imperfectly treated, and where the action essential to articulate language has been altogether omitted. Tracing the volume of simple sound in its ascent from the glottis, it should be noted how well calculated the *epiglottis* is to direct that sound forward to the passages above. The soft palate, seen at the back part of the roof of the mouth, hangs immediately above the epiglottis, and being furnished with many muscles, it is rapidly drawn down and furled up. This fold forms the partition between the *mouth*, properly so called, and the back mouth, *arrière bouche* of the French, in other words the pharynx; and the whole of the curtain, with the arches of the palate, and the *uvula* (or *pap of the hass*, as it is called in the northern division of the island), vary their condition during the production of simple sounds. So extensive and complete is the action of this fold, that our author states he has seen it completely interrupt the ascent of the breath in that direction which leads to the nose and upper parts of the face. The pharynx, then, it will be understood, forms a great irregular bag of a muscular texture, having the glottis opening at its under part, whilst above it is terminated by the posterior nostrils, and by the mouth anteriorly. Considering the passage for the voice as one irregular cavity, extending from the glottis to the lips and nostrils, it is subject to great changes, and powerful in its influence over the voice. For, although the breath is made vocal by the larynx, both the musical notes in singing, and the vowels in speech, are effected by the form and dimensions of this cavity. When the pharynx is by accident divided, and the top of the windpipe exposed, no sound issues from the larynx upon the attempt to speak. By great effort a noise may be produced, but any thing like the common effort of speaking is attended with no audible sounds. From this, it is inferred that the delicate vibrations necessary to articulate language, are influenced not merely by the action of the glottis, but by the condition of the walls of the pharynx, the cavity into which the sound is thrown. In this part of the air-passage there is a correspondence with the common flute or pipe, in as far as it is lengthened during the grave sounds, and shortened in the acute. Even although the glottis performs the principal part, the pharynx lends a very powerful help. It is impossible to see a singer running up the notes to the highest, without admitting there must be a vast influence produced by the alternate shortening and elongation of the pharynx and month. To allow the cavity to be shortened in the greatest degree, the larynx is raised, and the lips retracted; on the contrary, the trachea descends, and the lips are protruded to lengthen the cavities and give out the lower notes.

We now proceed to the important subject of *articulation* or *speech*.

In pronouncing the vowels, which are simple continued sounds, and the diphthongs, which are the combination of these open sounds, the pharynx, at all times irregular, varies its forms or dimensions without interrupting or cutting the sounds. These sounds are universal and expressive: others are more conventional, and form the constituents of articulate language. It has generally been imagined that the vocalised breath ascending into the mouth, is there divided, and made articulate by the tongue, teeth, and lips, and that this comprehends the whole art of speech. This, however, it would appear, is far from being the case, inasmuch as in articulating or forming the consonants, the pharynx is a very principal agent; and this smaller cavity of the pharynx is in fact substituted for the larger cavity of the chest, to the immense relief of the speaker, and the incalculable saving of muscular exertion.

The late eminent Dr Thomas Young made a comparison of the power employed by the glass-blower in propelling the air through his tube by the force of his cheeks, and in propelling it by the force of his lungs; and calculating the ease with which the lesser cavity (the cheeks) is compressed in comparison of the greater, he concluded that the weight of four pounds would produce an operation through the lesser cavity equal to seventy pounds weighing on the former, or, in other words, it was more than seventeen times easier to work with the lesser cavity than with the greater. The cause of this and many other results which appear paradoxical, is that peculiar quality of fluids by which they transmit pressure equally in all directions; and this wonder-working property, it will be believed, is not disregarded in the scheme of animal structure. When a forcing-pump is let into a reservoir, it produces surprising effects. The piston of the hydraulic press being loaded with the weight of a pound, the same degree of pressure will be transmitted to every part of the surface of the reservoir, equal in magnitude to the base of the piston. A man standing on the hydraulic bellows raises himself by blowing into the tube; and, contrarywise, the weight of his body does not produce from that tube a blast of air superior to the force of the contraction of his cheeks. Before demonstrating the influence of this principle on articulation, it may be exemplified by a familiar instance:—A sailor, leaning his breast over a yard-arm, and exerting every muscle on the rigging, gives a direction to the whole muscular system, and applies the muscles of respiration to the motions of the trunk and arms, by the agency of a small muscle of the windpipe, which, incapable of raising the thousandth part of the weight of his body, and weighing but five grains, yet controls and directs the whole. The explanation is this:—A man preparing for exertion, draws his breath and extends his chest. Were the muscles which expand the chest to continue in exertion to preserve it so, there would be a great expenditure of the vital force. But this is rendered unnecessary by the action of the small muscle which closes the glottis: it shuts the extremity of the windpipe, and has here a power to confine the column of air superior to the united power of all the muscles of the chest and trunk together. However powerful these muscles may be in compressing the chest, their influence is very small on the column of air in the windpipe, their pressure there being no more than on any part of the walls of the chest, which is of the same diameter as the bore of the tube. The closing of the glottis throws all these muscles free to act as muscles of the trunk and arms; but if this little muscle permit the air to escape, these muscles sink with the falling chest; they lose their power as muscles of volition; and, consequently, all powerful efforts cease in an instant. Thus it happens that a muscle of the glottis not weighing the thousandth part of the muscles of the trunk of the body, controls them all; and this it is enabled to do on the principle of the hydraulic press: hence, then, we are prepared to understand the great importance in the animal economy of power being employed in a lesser cavity in preference to a larger, and how much will be saved by the agency necessary in articulation being given by the pharynx instead of the greater cavity of the chest.

To return, then, to the pharynx. We now know that it is a large cavity behind the palate, formed by a dilatible bag, acted upon by many muscles. We have seen that the sound issues into it from the glottis beneath; and that although it opens into the nose above, yet this passage is closed as with a valve when the curtain (*velum*) is raised; at such a time, if the mouth be also shut, the bag will be closed on all sides, and may then suffer distension by the vocalised breath ascending through the glottis. In speaking, much of the sound, namely, that of the vowels and diphthongs, is the uninterrupted issue of the vocalised breath, modulated and differently directed by the passages, but not checked or interrupted; the consonants are the same sounds checked by the tongue, lips, and teeth; at the moment of this interruption, the pharynx being distended, is prepared to give a stroke, or *appulse*, as it is called, by its muscular energy, exactly in time with the parting lips. If we lay the hand upon the throat while speaking, so that the fingers embrace the bag of the pharynx, we shall feel that each articulate sound is attended with an action of the pharynx, and preceding many of the letters (the explosive) we shall be sensible of the distension of the throat. We may moreover observe, that, while the distended chest falls regularly and uniformly, the pharynx is alternately distended and compressed in correspondence with the articulate sounds. We can now understand that, if the appulse of the breath in speaking arose from the action of the chest, it would be attended with great and unnecessary exertion, since in proportion to the size of the reservoir and the smallness of the tube that gives issue, would be the force required on the sides of the reservoir to produce an impulse along the tube. If each consonant or accented syllable required the action of the whole thorax, we should find that a man, instead of being able to deliver an oration of some hours' duration, would be exhausted in a few sentences, like a person who bellows, and both disturbs and pains us with his violence.

After this minute and accurate exposition, we might almost say analysis, of the organs of the voice, Sir Charles proceeds to a learned criticism of that department of the labours of grammarians in which they have attempted to explain the formation of the several letters as divided into mutes and semi-mutes, labials, gutturals, &c.; and after showing that their explanations were necessarily imperfect, owing to their unacquaintance with these physiological details, and that they accounted for all the peculiar sounds by the position of the lips, tongue, and palate only, without reference to the pharynx, he offers various suggestions which must tend greatly to facilitate their future investigations. From the same misconception of the actions which combine to form the voice, it appears that the grammarians have not supplied a very clear account of *emphasis* and *accent*. According to the foregoing views, there are two sources of the force with which words are uttered, namely, the chest and pharynx. The emphatic delivery of several words or syllables must proceed from the forcible expulsion of the breath by the effort of expiration; but the emphasis on a single syllable, and the forcible enunciation of a letter, on which the clearness and distinctness, and sometimes the meaning of words depend, must be produced by the effort of the pharynx.

It is curious to observe how many parts conform, and how many actions must accurately correspond, to produce the simplest sound; and how many additional combinations there must be for the formation of articulate voice. As we may audibly breathe through a trumpet without producing a note of music, so we breathe without the tremor of the glottis to produce not the voice properly so called, but merely a whisper; the vocal chords being strung by the action of their muscles, in correspondence with the forcible expulsion of the breath they vibrate, and this vibration is reverberated on the column of air, and thus the breath is vocalised, and vowel-sounds are produced. Thus, too, musical notes are produced by the changes in the force with which the voice is propelled, the degree of tension of the vocal chords, and the modulation or change in the open passages. Nothing is more surprising than the precision with which the notes of the human voice are produced, as when we hear, rising over the sound of the organ, the notes more liquid and distinct, and descending again in notes and half notes, as if each arose from a different pipe, and were struck on a distinct instrument. Yet these falls are consequent on muscular action, which alters the diameter and form of the glottis, and the length and diameter of the pharynx. This minute accommodation of action does not merely evince the perfection of the organ, but shows the most surprising command possessed over it: and in this respect the muscular apparatus of the throat does not yield in comparison with that of the eye itself. Struck with the perfection of the human voice in expression and variety, excelling the finest instrument mathematically constructed, we have more still to admire in the production of those conventional sounds which become the instruments of thought, and the source of all we know. In speaking, the voice is much influenced by the varying forms of the open passages, before it is articulated in the mouth; whilst with each motion of the tongue or lips, there is a correspondence in the action of the velum and pharynx: so that the compression of the thorax, the adjustment of the larynx and glottis, the motions of the tongue and lips, and the action of the pharynx and palate, must all consent before a word be uttered.

One other remark, and we have done. In speaking, the play of the chest is not the same as in the common act of breathing. The midriff, or *diaphragm*, is used less, and the ribs a great deal more. An orator preparing to speak, elevates his chest, whilst the abdomen is drawn flatter; the effect of which is to give more ready play to the elastic parts of the ribs, and the falling of the elevated chest is easy and unembarrassed; whereas, to expel the breath beyond a certain degree, requires great muscular exertion, and makes the act of speaking still more complicated. This whole exposition throws much light on the nature of *stammering*, and on the cure of that distressing infirmity. When we look at the number of parts which must combine in the production of articulate sound, we cannot be surprised that the voice should be defective through derangement of the nervous system. In a person who stammers, the imperfection is obviously in the power of combination, not in the defect of any single part. The stutterer can invariably sing his words without hesitation, or impediment, or spasm; because, in singing, the adjustment of the glottis and the due propulsion, by the elevated chest, are accomplished, and continue uninterruptedly. So is it with many a clergyman whose stammering is most painful in a room, but who, on ascending a pulpit, can deliver a long discourse without a faltering word. A person who stutters experiences no distress in pronouncing the vowels and liquid consonants; and if he study to commence his speech with a vowel-sound, he can generally add to the vibration already begun the proper action of the pharynx. Another necessary combination often distresses the stammerer, namely, the action of the expiratory muscles, and that of the muscles of the throat. He wastes his breath so much in his attempts at utterance, that, to produce a sound at all, the ribs must be forcibly compressed. Upon the understanding of these particulars consists the science, often greatly abused by vain and ignorant pretenders, of affording relief in these painful and unfortunate cases.

THE MAIDEN, AN ANCIENT INSTRUMENT OF EXECUTION.

A FAVOURITE theme of gossips' stories in Scotland is *the Maiden*, an instrument of execution very nearly resembling the modern French guillotine, which was in considerable practice during the sixteenth and seventeenth centuries, especially for the punishment of state offenders. The common tale is, that the Earl of Morton, so eminent as a statesman during the reign of Mary, and who ultimately came to be Regent of Scotland, introduced this instrument from abroad, and was himself—so willed the fates—the first to suffer by it. It does not seem to have been used since the Revolution: when Pennant visited our northern clime in 1772, he found a specimen of the implement, being probably that which had been used in Edinburgh, laid aside as a piece of lumber in a room under the Parliament House. The axe connected with another has long been kept in the town's armoury of Aberdeen. About twenty-five years ago, the machine kept underneath the Parliament House was obtained by the Scottish Antiquarian Society, and placed by them in their hall, or museum, where it still exists, and is open every day to public inspection.

This remarkable engine of death—in all probability the very same which dispatched Morton and many not less eminent men—is a huge ungainly piece of timber-work, about ten feet high, blackened over, and altogether such a thing in look and bearing, as any

one would at a glance presume to have had a terrible history. Two upright beams, about twelve inches apart, connected at top and bottom by cross pieces, form a grooved channel for the rising and falling of the axe—a deep blade, loaded with a vast weight of lead. At four feet from the ground, there is another cross bar, covered deeply with leather, on which the culprit laid his head. A moveable piece, coming down above, enclosed and fixed the neck till the axe had done its duty. The rope used for pulling up and sustaining the axe, was fastened to a trigger placed upon a sloping beam which supports the upright grooved frame, like the hypothenuse of a triangle. On the trigger being moved, the rope of course gave way, and the axe, descending with a force derived from its weight, and the space traversed (about six feet), sheared through the interposed neck, and only stopped on the leather-covered cross bar—the head falling into a basket behind, the hook for suspending which is still fixed in the wood. The body of the criminal is supposed to have been laid along upon a bench or table, the end of which was brought against the two upright beams, at about the same height with the bar for the neck. Of this bench no part has been preserved. It is also to be remarked, that one of the upright beams, having been found greatly decayed, was replaced by another of fresh timber, at the expense of the Society. The upright and sloping beams are fixed on a lying framework, necessary for giving stability to the instrument.

It will be observed from this description that the celebrated invention of Dr Guillotin is in some respects an improvement upon the Scottish Maiden. The axe, in that case, is arrested by no cross beam, but, after shearing through the neck, descends several feet lower. Its lip is also oblique, in order that it may have a surer effect in cutting through what is opposed to its descent. Finally, in connection with the frame-work for the axe, there is a moveable board, on which the culprit is bound upright, and which is then folded down and pushed forward—the forward movement being that which loosens the axe—so that the whole operation is conducted with the greatest possible dispatch and certainty. Hence it is that the average duration of a French execution, from the arrival of the criminal on the scaffold, to his being a headless corse, is from a minute and a half to two minutes.

Notwithstanding the confidence with which tradition speaks of the introduction of the Maiden into Scotland, the early history of our employment of the instrument must be considered as obscure. Beheading with a sword was a common mode of punishment in the middle ages. It prevailed in Scotland, as well as in other European countries. For example, the gallant Sir John Gordon, who suffered at Aberdeen in 1562 for rebellion, was beheaded with a sword, and cruelly mangled, we are told, by an unskilful executioner. As this was an operation which necessarily depended much on the skill and strength of the man employed in it, we cannot wonder that ingenuity was set to work, in various places, to effect decollation with mechanical accuracy. We have heard of such mechanical contrivances being in use both in Italy and Germany. At Halifax in Yorkshire, from an early period, an instrument exactly like the Scottish Maiden was used, being the only thing of the kind ever employed, as far as we are aware, in England. Whether it was set up there, by Earl Warren, son-in-law of the Conqueror, to punish trespassers on his forest of Hardwick, or in the reign of Henry VII., to repress the depredations suffered by the cloth-tenters who then began to flourish in Halifax, is unsettled by antiquaries: perhaps neither surmise is true. The instrument, however, would appear to have been designed from an early age for a peculiar terror to evil-doers in that district; and the promptitude with which it was put into action became proverbial. By a quaint regulation highly characteristic of our ancestors, when a cow or horse was the piece of property stolen, the animal was caused by means of a rope to pull the trigger, and thus become the proximate executioner of justice upon the offender. By records it is ascertained that twenty-five persons suffered by the Maiden at Halifax in the reign of Elizabeth, and at least twelve between 1623 and 1650, after which it became disused. Pennant, in 1772, saw, at the end of the town, the stone-built platform, about four feet high and thirteen broad, on which the instrument used to do its deadly work.

According to the History of the House of Douglas, the author of which lived in Scotland at the time when Morton suffered, that nobleman had caused the Maiden to be made "after the pattern which he had seen in Halifax in Yorkshire."* This author says nothing which can countenance the now existing story as to Morton having been the first to suffer by the instrument in Scotland. In a manuscript work of inferior authority, entitled "Divine Providences," written in the reign of Charles II., by a clergyman named Fraser, and which is preserved in the Advocates' Library, it is stated that Morton took the pattern of the instrument from one which he saw in Italy during his travels in early life; and it is added, that, from his being the first to suffer by the machine, a popular and not very delicate remark was made, which gave rise to the appellation by which the instrument came to be distinguished. It is also worthy of notice, that Kelly introduces into his collection of proverbs, "He that invented the Maiden, first *hanselled* it." That Morton did introduce the Maiden, is to be considered as likely, since we have the respectable authority of Hume of Godscroft on that point; but that he was not the first to suffer by it, has lately been rendered certain by a paper read before the Scottish Antiquarian Society by the Rev. Dr Lee, one of the ministers of Edinburgh. In this paper, the following excerpt is given from the books of the treasurer of the city of Edinburgh, where it appears under date April 3, 1566: "For beiring daillis and puncheons fra the Blackfreris to the Croce with the Gibbet and *Madin*, and awaiting thereon, the day when Thomas Scot was justefeit, vijsh. To Andro Gotterson, smyth, for grynding of the *Madin*, v sh." Now, though Morton was one of the most guilty parties in the murder of Rizzio, for which the comparatively humble Thomas Scot was "justefeit," this event was fifteen years antecedent to the death of the Regent. In the ensuing August, Andro Gotterson gets five shillings "for grynding of the Widow." Are we to suppose that the *Maiden* and the *Widow* were at this time employed as convertible terms for the same instrument? It is shrewdly remarked, in a clever book just published,* that the story of Morton's being the first to suffer by the Maiden, is "just such an exaggeration as the popular voice most affects. Thus, to the fact that Deacon Brodie suffered by his own improved drop, common fame has added the embellishment that he was the first to prove its efficiency. And thus Dr Joseph-Ignace Guillotin died quietly in his bed, on the 26th of May 1814, aged three score and seven years,† long after it was universally reported and believed that he had perished by the machine which has given to his name an immortality of infamy."

The Earl of Gowrie in 1584 (father of the celebrated conspirator) seems to have been the only man of distinction who suffered by the Maiden between the period of Morton's death and the time of the Civil War. Hanging and burning were the favourite modes of execution during the intermediate age. The instrument appears to have been again brought into use in 1646, when the Scotch Parliament found an opportunity of wreaking their vengeance upon Sir Robert Spottiswood, the distinguished Royalist, who had been taken prisoner at the battle of Philiphaugh. Sir Robert had come to Scotland with a commission from Charles I. as secretary of state: it could not be alleged against him that he had borne arms among the Royalists, unless, as he said, his walking-cane could be so designated. In fact, his only real crime was that of being son to the late Archbishop of St Andrews. Nevertheless, the Estates determined that he should suffer. They were at that time sitting at St Andrews, on account of the plague which raged in Edinburgh, and they determined to have their iniquitous sentence carried into execution in that town, from an idea that the seat of his father's aggrandisement was an appropriate scene for the degradation of their victim. They accordingly issued the following warrant to have the Maiden brought to St Andrews from Dundee, in which town, for some reason unknown, it happened to be at that time.

"Decimo sexto Januarii, 1646—38 die Parl. at St Andrews.—The Estates of Parliament give hereby warrand to transport the Maiden from Dundee to St Androis, and ordains the Magistrates of Dundee to delyver the Maiden to sic as sal be sent from the town of St Androis for transporting thereof. Quhairanent thir presents sal be ane warrand."

It was accordingly used for the execution of this venerable gentleman—one of those rash and vindictive proceedings which were only expiated in the succeeding reign by the oppressions and persecutions to which the Scottish Presbyterians were in their turn subjected by the Royalists. Two or three other prisoners taken at Philiphaugh were executed by the Maiden.

The next personage who fell a sacrifice to it was the Marquis of Huntly, in 1649. About this period, and for some years later, it was used to execute almost all kinds of criminals. We have observed from a manuscript abridgement of the Books of Justiciary in the Advocates' Library, that even women guilty of child-murder were executed by it. Perhaps it was as a peculiarly ignominious distinction that the Marquis of Montrose, in 1650, was hanged. A return to the disgrace of the rope, in his case, might be looked upon as not the least severe part of a punishment intended to comprehend every possible indignity.

After the Restoration, if less actively employed, the Maiden was still continued in use. It was brought into play at the execution of the Marquis of Argyll, in 1661, as also that of his son the Earl in 1685; the latter, in kneeling to submit his neck to the axe, embraced the instrument in his arms, and said it was the sweetest maiden he had ever kissed. After this time, there occurs no notice of its ever having been again employed.

* History of the House and Race of Douglas and Angus, by Mr David Hume of Godscroft; fourth edition; ii. 391.

* The Book of Bon Accord, or a Guide to the City of Aberdeen. Aberdeen, Lewis Smith. 1839.

† He was even older, if the following interesting notice of him in the Biographie Moderne be true: "Guillotin, a physician at Paris, born at Saintes on the 29th of March 1738, deputy from the tiers-état of Paris to the States-general, lived almost unknown before the Revolution; and what caused him to be chosen a deputy, was, that he had been fixed on to prepare a writing called the Petition of the Six Corporations, which became interesting on account of the effect it produced on the public mind, and the suit commenced by the court of law at Paris against the author, who, after having been summoned to the bar, was carried back in triumph by the people. When appointed a member of the National Assembly, Guillotin attracted attention chiefly by a great gentleness of disposition. On the 1st of December 1789, he made a speech on the penal code, in which a tone of the greatest humanity obtained, and which terminated by a proposal for substituting, as less cruel than the cord, that fatal machine which received his name, and which in the end sacrificed so many victims. In 1790, he again took a part in the discussions on the penal code. Some persons, carried away by the horror this machine has since excited, have considered as a monster one of the gentlest, and, at the same time, most obscure men of the Revolution. Nobody has deplored more bitterly than he the fatal use that has been made of his invention. Those who are acquainted with Guillotin describe him as a clever, cool, reserved man, of unblemished integrity, who in some sort retired from the Revolution when he perceived the course to which it was directed. He is at the present day [1811] one of the best physicians in Paris, and is commissioned by government to direct the discovery of the cow-pox."—*Biographie Moderne*, ii. 124.

SNATCHES OF CONTINENTAL RECOLLECTIONS.

THE BELGIAN CURRENCY, AND OTHER MATTERS.

THE money currency of Belgium is not yet of a perfectly uniform character, but is much superior to that of Holland. The Dutch coinage is execrable. With the exception of the handsome ten-guilder and five-guilder gold pieces, which resemble our sovereigns and half-sovereigns, the principal part of the current coin consists of florins or guilders, value twentypence, half and quarter florins, and dubbletjes. These are formed of a base mixture of brass and silver, and being greatly worn, they have the appearance of bad English shillings and sixpences of the old coinage. The dubbletje, which is of the value of two stivers or pence, is a paltry little thing, perfectly smooth on the sides, and with edges almost as sharp as a knife. On account of this sharpness, the dubbletje is often used as a weapon of offence by the Dutch boors in their quarrels with each other; for when held firmly between the knuckles of the closed fist, it is capable of inflicting a slashing wound upon the face of an antagonist.

The notice of this quality in the dubbletje reminds me of an anecdote which was mentioned to me in Holland. On one occasion, many years ago, the inhabitants of a village had assembled for some purpose in the court-house—(every Dutch village, however insignificant, has its court-house or hall for the transaction of public business)—and, as usual at such meetings, their knives, of which each person carried one, were hung round the wall. It was an understood law in these rude assemblages, that no one should touch the knife of another, on pain of an immediate encounter. At the meeting to which I allude, there chanced to be two individuals of very opposite appearance and character. One was a tall and stout man, as his name Sterkus would seem to import, and of a most turbulent disposition. The other, called Jantje, or Little John, was a dwarfish being, active withal, but hunchbacked from an injury in his youth, and distinguished in the district as of a singularly gentle and inoffensive temper. Whether from heedlessness or design, Jantje, in wandering round the hall to examine the display of weapons, touched that which belonged to Sterkus, who, glad of an opportunity of quarrelling, instantly challenged the little fellow to single combat. As the odds were most unequal, all exclaimed against this cruel proposal, and endeavoured to pacify the enraged giant. As for poor Jantje, he expressed concern for his error, and begged to be forgiven. But no; nothing would satisfy Sterkus but an immediate engagement. After a certain time spent in wrangling on the subject, Jantje seemed to pluck up courage, and declared, to the astonishment of all, that he accepted the challenge to single combat. With a spirit flashing from his eyes that no one had previously imagined him to be possessed of, he stood forth and demanded that as he was thus forced to fight, he should have the free choice of the weapons wherewith he was to defend himself. An universal shout of approbation gave him the choice which he desired. Retiring for a moment from the room, he returned, armed with an old shoe in one hand, and a dubbletje in the other. The amazement of all was awakened at this extraordinary kind of preparation, which bore no small resemblance to that of David when he went out to meet Goliah. Jantje, however, felt confident in his choice, and the fight began. A few rounds

showed that Jantje had not miscalculated the nature of his tactics. Sterkus attacked him with his large knife, dealing out blows, at every one of which the spectators expected to see poor Jantje annihilated; but the little man used so much dexterity in warding off the blows with the shoe in one hand as his shield, while with the dubbletje in the other, and by a well-timed leap, he cut and scratched his adversary's face in such a manner that the giant, quite exhausted with his vain efforts, and pained with the slashings which the piece of money occasioned, was at last obliged to yield to Jantje. He left the field, his face covered alike with shame and blood, while his triumphant antagonist, comparatively unharmed, was loudly cheered and congratulated by the company, who now declared that his name should ever afterwards be Jantje Kordaat, or Little John the Bold.

Returning, after this digression, to the subject of coinage, it may be observed that the common money currency of Prussia and the smaller states, is nearly as bad as that of Holland. The Frederick d'or of gold, value 16s. 9d., and the double and half Fredericks, are elegant pieces; the silver thaler, value about 3s., is also of respectable appearance; but all the inferior coins, assumed to be silver, are of the same base metal as the Dutch florins. Small bank-notes, bearing to be for a thaler each, are common in the Prussian provinces.

When the stranger enters Belgium, he finds himself in a land of intelligible coins. Some of the Dutch money is still in currency, but the greater part of the coins in circulation are of a new mintage, the head of Leopold being on one side, and the value of the piece marked on the other. The money reckoning is precisely the same as that of France, being by francs and centimes. The new silver coins are half-francs, francs, and five-franc pieces.

The Belgians have likewise adopted the French system of weights and measures. As I do not remember having ever seen this system described by any traveller, I shall here attempt an account of it, culling the main particulars from an intelligent little work which I procured in Brussels, called the "Hand-Book for Belgium."

The French system of weights and measures is established on a principle much more simple and unerring than that in use in England—the former is of universal application, the latter can never be any thing but local. The French unity of length and weight is based on an invariable dimension of the terrestrial globe, which is recognisable in all countries. It is independent of all extrinsic notions, such as gravity and the arbitrary subdivisions of duration, an advantage which the length of a seconds pendulum certainly does not present. The admeasurement, then, of a fourth of the earth's meridian—an ideal circle going round the globe from pole to pole at right angles with the equator—constitutes the basis of the French system. The length of this fourth of the meridian is divided into 10,000,000 parts; a single ten-millionth part is the *metrè*, or the unity of long measure. (A metre is equal to 39 English inches.)

A square, measuring on each side 10 metres, forms the *are*, or the unity of the mensuration of surface. (160 ares are equal to one British acre).

A cube, measuring on each of its sides one metre, constitutes the *stère:* used for dry measure.

A cube, measuring on each of its sides the tenth part of a metre, is the unity of volume. A vessel, guaging such a cube, is the unity of liquid measures, and is called the *litre*. (A litre is equal to about a pint and three quarters, or nearly a quart, English measure).

The weight of a cube of water, measuring on each of its sides the 100th part of a metre, is the unity of weight, and is called the *gramme*. A thousand grammes of pure water at its greatest density (about 40 degrees of Fahrenheit's thermometer), are of course equivalent to the litre. (A thousand grammes (a killogramme) weigh about 2¼ pounds British).

These unities being often too great or too small for common use, they constitute the basis of new unities on the simple decimal principle. The names of these new unities are formed from Greek and Latin words. If to express multiplication of the original unity, Greek is used; if to express division of the original unity, Latin, or words slightly modified from the Latin, is used. The Greek words are *deca*, for ten, *hecto* a hundred, *kilo* a thousand, and *myria* ten thousand. The Latin words are *deci*, for ten, *cente* a hundred, and *milli* a thousand. These various words are placed before, or prefixed to, the principal unity. Thus, the *decamètre* is equal to ten metres, and the *decimètre* is the tenth part of a metre; the *hectolitre* is equal to 100 litres, and the *centelitre* is the hundredth part of a litre; the *killogramme* is equal to a thousand grammes, and the *milligramme* is the thousandth part of a gramme.

The connection between these weights and measures will now be clearly seen. The *are* is the square decametre; the *litre* is the cubic decimetre; and the killogramme is the weight of a litre of pure water at its maximum density.

The currency of the country being assimilated by decimal reckoning to the weights and measures, it may be safely averred that the whole world cannot produce a more simple and immutable plan of calculation than that now in use in France and Belgium.

Throughout Holland and Belgium there is established a most rigorous and exact method of registering births, originating, I believe, in the principle in the constitution, that every male citizen is born a soldier, and is liable to be called to arms when he attains a certain age. According to law, every birth, whether of a male or female, must be registered in the town-books within twenty-four hours, under a severe penalty for neglect. No child can be baptised (at least in Holland) until this preliminary has been effected; a certificate of the registration is the clergyman's warrant to baptise. Should the child afterwards die, the name is erased from the roll of births. By this plan of registration, the civic authorities can point out annually whose turn it is to be drafted into the militia, and check every attempt at false assumptions of citizenship. So excellent has been the practice of registration in Holland for a long period of time, that genealogies can with great ease be traced in that country.

There exists in Holland, though I am not aware that the law extends to Belgium, a most annoying set of regulations regarding marriage, A marriage cannot be legally solemnised without the consent of the parents of both parties, or, if the parents be dead, a certificate to that effect must be lodged. It would be difficult to estimate the degree of annoyance caused by these absurd arrangements; in some instances, as I was informed, parties desirous of being married, but who could not fulfil the conditions of the law, have left the country for England, and there been united.

NATURALIST'S LIBRARY—SEALS, &c.

THE twenty-third volume of Mr Lizars's beautiful and most meritorious work, the Naturalist's Library, just published, is chiefly occupied by an account of the Amphibious Carnivora (walrus, seals, &c.), the production of Dr Robert Hamilton of Edinburgh. To this is added an account of the group of Herbivorous Cetacea, including the Manatee (the mermaid of ill-informed observers), the Dugong, &c. The whole treatise is in the highest degree creditable to the series, and to the talents and industry of the writer. Over and above all consideration of its merits as a popular treatise, it presents much new information on the Amphibious Carnivora, and portraits of several species, not formerly depicted. Such a volume, with thirty copper engravings, all (except three) coloured after nature, for six shillings, must be held as one of not the least wonders of this wonder-working age.

Dr Hamilton gives, in conclusion, a view of all that has been reported respecting the supposed great sea-serpent and kraken, creatures which have hitherto made a much greater figure in sailors' tales and newspaper paragraphs, than in the annals of natural history. Our author is inclined to admit that the reports respecting them, though exaggerated and often wrong, are not all destitute of foundation in truth. The kraken he supposes to be an unusually large species of the sepia or cuttle-fish—a sea mollusk, which is authentically known sometimes to reach the great size indicated by a breadth of twelve feet. His account of the Great Sea-Serpent we shall present entire, as a portion of the work likely, while entertaining our readers, to support the few words of praise which we have bestowed upon the whole.

"That much fable and exaggeration have been mixed up with the history of the great sea-serpent, cannot be doubted; still, however, the inquiry recurs, What portion of truth is involved amidst this error?

We turn, first, to an account of an animal which apparently belonged to this class, which was stranded in the island of Stronsa, one of the Orkneys, in the year 1808, and which was first seen entire, and measured by respectable individuals, and afterwards, when dead and broken in pieces by the violence of the waves, was again examined by many; portions of it being secured, such as the skull, and upper bones of the swimming paws, by Mr Laing, a neighbouring proprietor; and other portions, such as the vertebræ, &c., by being deposited and beautifully preserved in the Royal Museum of the University of Edinburgh, and in the Museum of the Royal College of Surgeons. An able paper on these latter fragments, and on the wreck of the animal, was read by the late Dr Barclay to the Wernerian Society, and will be found in the first volume of its Transactions, to which we refer. We can allow space only for a very short abridgement of these documents, which, be it remembered, furnish an account of the animal principally after it had been mutilated; and hence we cannot wonder if the original accounts are both imperfect and contradictory. It measured fifty-six feet in length, and twelve in circumference. The head was small, not being a foot in length, from the snout to the first vertebra; the neck was slender, extending to the length of fifteen feet. All the accounts agree in assigning it blow-holes, though they differ as to their precise situation. On the shoulders, something like a bristly mane commenced, which extended to near the extremity of the tail. It had three pairs of fins or paws connected with the body; the anterior were the largest, measuring more than four feet in length, and their extremities were somewhat like toes, partially webbed. Dr Fleming, in his notice of this animal, suggests that these members were probably the remains of pectoral, ventral, and caudal fins. The skin was smooth, without scales, and of a greyish colour; and the flesh appeared like coarse ill-coloured beef. The eye was of the size of the seal's; the throat was too narrow to admit the hand. From the many affidavits proffered by most respectable individuals, as well as from other circumstances narrated, there is no manner of doubt as to the existence of some such animal.

We shall next allude to the unvarnished account recently given, of a great animal which excited considerable astonishment and alarm among the western isles of Scotland. The following extract is taken from a letter of Mr Maclean, the parish minister of Eigg, dated 1809, to Dr Neill, the learned and worthy secretary of the Wernerian Society:—'I saw the animal of which you inquire in June 1808, on the coast of Coll. Rowing along that coast, I observed, at about the distance of half a mile, an object to windward, which gradually excited astonishment. At first view it appeared like a small rock; but knowing that there was no rock in that situation, I fixed my eyes closely upon it. Then I saw it elevated considerably above the level of the sea, and, after a slow movement, distinctly perceived one of its eyes. Alarmed at the unusual appearance and magnitude of the animal, I steered so as to be at no great distance from the shore. When nearly in a line between it and the shore, the monster, directing its head, which still continued above water, towards us, plunged violently under water. Certain that he was in chase of us, we plied hard to get ashore. Just as we leapt out on a rock, and had taken a station as high as we conveniently could, we saw it coming rapidly under water towards the stern of our boat. When within a few yards of it, finding the water shallow, it raised its monstrous head above water, and, by a winding course, got, with apparent difficulty, clear of the creek where our boat lay, and where the monster seemed in danger of being embayed. It continued to move off with its head above water, and with the wind, for about half a mile, before we lost sight of it. Its head was somewhat broad, and of form somewhat oval; its neck somewhat smaller; its shoulders, if I can so term them, considerably broader, and thence it tapered towards the tail, which last it kept pretty low in the water, so that a view of it could not be taken so distinctly as I wished. It had no fins that I could perceive, and seemed to me to move progressively by undulation up and down. Its length I believed to be between seventy and eighty feet. When nearest to me, it did not raise its head wholly above water, so that the neck being under water, I could perceive no shining filaments thereon, if it had any. Its progressive motion under water I took to be very rapid. About the time I saw it, it was seen near the Isle of Canna. The crews of thirteen fishing-boats, I am told, were so much terrified at its appearance, that they, in a body, fled from it to the nearest creek for safety. On the passage from Rum to Canna, the crew of one boat saw it coming towards them, with the wind, and its head high above water. One of the crew pronounced the head as large as a little boat, and its eye as large as a plate. The men were much terrified, but the monster offered them no molestation.' Dr Hibbert mentions that the great sea-serpent has occasionally been recognised in the Shetland seas, and specifies one which was seen off the isle Stonness, Vaeley Island, and Dunvossness.

We now turn to several instances of the appearance of the sea-serpent which have been witnessed off the coast of America, and we do so by referring first to the Report published by a Committee appointed by the Linnæan Society of New England, to collect all the evidence they could obtain on the subject. In the month of August 1817, it was generally reported that a very singular animal of prodigious size had been frequently seen in the harbour of Gloucester, Cape Ann, about thirty miles from Boston. In general appearance it resembled a serpent, and was said to move with astonishing rapidity. It was visible only in calm and bright weather, and floated on the surface of the water, like a number of buoys following each other in a line.

In the report to which we have referred, the affidavits of a great many individuals of unblemished character are collected, which leaves no room to apprehend any thing like deceit. They do not agree in every minute particular, but in regard to its great length, and snake-like form, they are harmonious. The first person who makes deposition, saw it for nearly half an hour, at the distance of two hundred and fifty yards. At

that distance he could not take in the two extremities with his glass. The second witness deposes that he observed a strange marine animal, which he believed to be a serpent: it continued in sight for nearly an hour and a half, and moved through the water with great rapidity, at the rate of a mile in two, or, at most, three minutes. On another occasion, he saw it lying perfectly still, extended on the water, and displaying about fifty feet of its body. The third witness judged it to be between eighty and ninety feet in length, with the head formed somewhat like the rattlesnake, but nearly as large as that of the horse. At one time it showed about fifty distinct portions of its body. The fourth witness saw it open its mouth, which appeared like that of a serpent. Another shot his gun loaded with ball at it, at the distance of thirty feet; when he found the monster immediately turned round, as if intending to approach him, and passed very near the boat. The tenth deposition we shall give somewhat more fully. 'On the 20th of June 1815, my boy informed me of an unusual appearance on the surface of the sea in the Cove. When I viewed it through the glass, I was in a moment satisfied that it was some aquatic animal, with the form, motions, and appearance of which I was not previously acquainted. It was about a quarter of a mile from the shore, and was moving with great rapidity to the southward; it appeared almost thirty feet in length. Presently it turned about, and then displayed a greater length, I suppose at least one hundred feet. It then came towards me very rapidly, and lay entirely still on the surface of the water. His appearance then was like a string of buoys. I saw thirty or forty of these protuberances, or hunches, which were about the size of a barrel. The head appeared six or eight feet long, and tapered off to the size of a horse's head. He then appeared about one hundred and twenty feet long; the body appeared of an uniform size; the colour deep brown. I could not discover any eye, mane, gills, or breathing holes; I did not see any fins or lips.' We add that there are many other depositions equally pointed as to the occurrence of this extraordinary creature, and several letters respecting it; one from the Honourable Lonson Nash, one of the committee of the Linnæan Society, and himself an eye-witness; and another, addressed by a clergyman to Judge Davis, the president of the society. General Humphreys, by whom the affidavits were taken, transmitted a copy of them, and a detail of the whole circumstances, to the late Sir Joseph Banks, in whose library the documents are still preserved.

An animal of similar appearance was again seen in August 1819, off Nahant, Boston, which remained in the neighbourhood for some weeks. When first seen, it was stationary for four hours near the shore, and two hundred persons assembled to view it. Thirteen folds were counted, and the head, which was serpent-shaped, was elevated two feet above the surface. Its eye was remarkably brilliant and glistening. The water was smooth, and the weather calm and serene. When it disappeared, its motion was undulatory, making curves perpendicular to the surface of the water, and giving the appearance of a long moving string of corks. The last notice we have seen of this American animal bears date July 1833. The Boston and New York papers of that date state that the sea-serpent had again appeared off Nahant. 'It was first seen on Saturday afternoon, passing between Egg Rock and the Promontory, winding his way into Lynn Harbour, and again on Sunday morning, heading for South Shores. He was seen by forty or fifty ladies and gentlemen, who insist that they could not have been deceived.'

In connection with the animal thus seen in America, we must not omit the authentic account of a previously undescribed species of serpent, which has a striking resemblance in some of its features to the apocryphal animal on which we are now dwelling. The Boston Society of Natural History has the merit of having first brought this serpent under the notice of zoologists, and the committee who described it, unhesitatingly regarded it as a specimen of one of the young of the great sea-serpent. It was seen and killed in September 1817, near Sandy Bay, between a salt lake and the sea, at no great distance from the shore, and was speedily brought to Boston for the examination of the society. It was a yard long all but half an inch. The contour of the back exhibited its most singular feature, for here was found a waving line, produced by a series of permanent risings, which commenced near the head, and extended, almost without interruption, to the tail; their total number being forty. The body could be bent with the greatest facility in the vertical direction, especially at the undulations, but not without great difficulty laterally. The society applied the name of *Scoliophis Atlanticus*. M. de Blainville, in analysing the various documents which have been published concerning this serpent, remarks—'That a new species of serpent has been discovered in America, which is really very singular, especially as it regards its vertebral column, ribs, and mode of progression, appears certain; but that this small serpent is precisely of the same species as the great marine animal which has appeared off the coast, and whose existence we can scarcely deny, is very doubtful.'

But long before the great sea-serpent was ever suspected of being a visitor of the British isles, or of the New World, it was regarded as a well-known member of the Fauna of Scandinavia. In this connection we will not omit the unquestionably exaggerated statements of the honest missionary Hans Egede, concerning what he tells us he himself witnessed off the coast of Greenland in the year 1734. After speaking of the mermaid, &c. he adds, 'None of these sea monsters have been seen by us, nor by any of our time that I could hear, save that most dreadful monster which showed itself on the surface of the water off our colony, in 64 degrees north latitude. This monster was of so huge a size, that, coming out of the water, its head reached as high as the main-mast; its body was as bulky as the ship, and three or four times as long. It had a long pointed snout, and spouted like a whale-fish; it had great broad paws; the body seemed covered with shell-work, and the skin was very rugged and uneven. The under part of its body was shaped like an enormous huge serpent; and when it dived again under water, it plunged backwards into the sea, and so raised its tail aloft, which seemed a whole ship's length distant from the bulkiest part of its body.' In the New History of Greenland, our author again speaks of this animal, and informs us that Mr Bing, another of the missionaries, took a drawing of it.

Finally, we subjoin the accounts, older and more recent, given of this animal in what may be called its native retreats. We shall begin with a short abridgement of the information supplied in Pontoppidon's Natural History of Norway:—'Our coast,' says the learned bishop, 'is the only place in Europe visited by this terrible creature. This makes many persons, who are enemies to credulity, entertain doubts about it. I have questioned its existence myself, till that suspicion was removed by full and sufficient evidence from creditable and experienced fishermen and sailors, of which there are hundreds who can testify that they have annually seen them. All these persons agree very well in the general description. In all my inquiries, I have scarcely spoken to any intelligent person who was not able to give strong assurances of the existence of this fish; and some of our traders think it a very strange question when they are seriously asked whether there be such a creature; they think it as ridiculous as if the question were put to them whether there be such fish as cod or eel.' After this, a long letter is supplied from Captain L. de Ferry, who was in his boat, with a crew of eight men, when they saw a sea-serpent, which he fired at and wounded. His description very much agrees with that already given, and every particular is authenticated by the affidavits of two of his crew. We are also informed that Governor Berestrap states, that he saw a similar animal a few years before, and drew a sketch of it. Mr Hans Strom, a clergyman, also caused a sketch to be made of one which came under his inspection, and other eye-witnesses are named. The bishop concludes, 'I might mention to the same purpose many more persons of equal credit and reputation.' But we must bring these statements of Pontoppidon to a close with one other short quotation. 'Though it is difficult to ascertain its exact dimensions, yet all who have seen it are unanimous in affirming that it appears to be about six hundred feet long; that it lies in the water in many folds, and there appears like so many hogsheads floating in a line, at a considerable distance from each other.'

Again, Sir A. de Capell Brooke makes allusion to this animal in his 'Travels in Norway.' He states that he did not witness it himself, but that the fishermen of Sejerstad stated that it was seen in 1818, in the Folden *fiord*. In July 1819, it made its appearance off Otersun in Norway, and Captain Schilderup stated to Sir Arthur that it was seen daily during the whole month, and continued while the warm weather lasted, as if dosing in the sunbeams. When Captain Schilderup first saw it, he was in a boat at the distance of about two hundred yards, and supposes its length to have been about six hundred feet. The Bishop of Nordland had seen two of them about eight miles from Drontheim; he was not far from them, and considered the largest to be about one hundred feet. Again, in 1822, one of these creatures, reported to be as bulky as a large ox, and about a fourth of an English mile in length, made its appearance off the island of Sorõe, near Tinmask, and was seen by many of the islanders.

The most recent account of this monster we have noticed, appeared in the public newspapers of Drontheim, in the autumn of 1837, and we confess we cannot regard it as a sheer fabrication:—'The Adis of this city contains an account from Tozen of the end of August, which it says was communicated to the editor by a very enlightened and principled man, so that it merits attention, as tending to remove the doubt respecting the existence of the sea-serpent. The account says, that since the beginning of the dog-days, the serpent has been seen at various parts of the coast of that district. One of them seems to have remained constantly during this summer near Storfosen, at the Kergvang Islands. Several fishermen have been so dreadfully alarmed at the sudden appearance of the serpent so near their boats, that they did not know in what direction to escape. The serpent did not attack, but followed the boat for some distance, and the men in their haste so over-exerted themselves, that two were confined to their beds. Very credible persons affirm that the length of the sea-serpent may be taken at six hundred or eight hundred ells, or perhaps more; for when these people were near its head, they could not discern its tail. Its greatest thickness is close to the head. These observations were made very clearly within these few days, amongst others, by a credible, sensible man, who, with his two sons, was on our island where they landed, and where the serpent, after following their boat, swam slowly by.'

With these extracts, and without further comment, we close our account of the great sea-serpent, only remarking, that till favouring circumstances bring the animal under the examination of naturalists, the satisfaction which is desiderated respecting it is scarcely to be expected."

BIOGRAPHIC SKETCHES.

CHARLES ROLLIN.

Charles Rollin was born at Paris on the 30th of January 1661. He was the son of a respectable tradesman, a cutler, who gave him the advantage of a good elementary education. The father died, however, while Charles was yet very young, and the latter was under the necessity of devoting himself, for the sake of his widowed mother and his brothers and sisters, to his father's employment. Having already acquired a strong predilection for a life of scholarship and study, young Rollin felt the deepest regret at being compelled to relinquish his favourite hopes, but the evil seemed without remedy; and had accident not intervened to give a new turn to his affairs, Paris would have had the services of a very indifferent cutler for a half century or so, and the world would have lost, for all time to come, the enjoyment of a great historian.

An old Benedictine priest, who was in the habit of performing mass every morning in the church of the White-Mantles, at Paris, observed a boy of pensive and resigned appearance to be extremely regular in his attendance on religious service. For a long time, the priest had no intercourse with the boy, yet felt a most sincere interest in him, on account of conduct so little seen in children of his age. At last the good Benedictine took an opportunity one day, at the conclusion of mass, to accost the young devotee. "My son," said he, "you appear to be an unusually good boy, and I feel that I have a great partiality for you; will you come home with me, that we may become acquainted?" The youth gladly followed the priest, and the pair were soon seated over a comfortable breakfast. "Come, my child," said the Benedictine, at its conclusion, "open your heart to me, and inform me of your name and prospects in life." Charles Rollin speedily acquainted the good father with the particulars of his situation. "After my father died," said he, "my mother said to me, 'Charles, my child, you must learn your father's profession for my sake, and for that of your little brothers and sisters. You must make a sacrifice of your love of learning to duty.' I did so; I began to learn the trade of cutlery, but alas! father, I am not expert at it, and they say I shall never be any thing but a sorry workman." The boy shed tears as he spoke. The Benedictine was moved, and exclaimed, "Such worthy inclinations shall not be lost to the world. You shall quit this profession, my poor boy, which suits you so ill. You shall return to your beloved studies; I myself will place you at the College of Plessis."

The priest was as good as his word, and the young devotee of the White-Mantles was ere long provided with a bursary at the College of Plessis, then one of the most learned establishments in France. Charles Rollin now found himself in his element, and rapidly rose to a prominent position among the numerous pupils of the seminary. He here formed a strong intimacy with the sons of M. Pelletier, then minister of the country; a connection which endured, with great benefit and pleasure to all parties, for many succeeding years. The minister had young Rollin introduced to him; and observing his uncommon talents and excellent dispositions, made him the companion and partner of the young Pelletiers, not only in their studies, but in their recreations. A source of the most unalloyed pride and satisfaction it was to the widowed mother of Charles, when the latter first came to her door in a splendid carriage, accompanied by the statesman's two sons, with whom he had been spending a portion of the holidays, and whom he had now brought to pass a day beneath his mother's humble roof. It is related, that when the cutler's widow beheld her Charles spring from the carriage before his companions, she felt scandalised at the want of deference which such an act manifested towards the minister's sons. She held her peace, nevertheless, and, after embracing her boy, invited his companions to enter, with great respect. The youths partook heartily of the meal of fruits and milk set before them, laughed, sang, and were as merry as possible. When the carriage came again to the door to take them away, Charles Rollin was about to enter it first, when his mother, who could not brook this second breach of due respect, exclaimed, "Shame, Charles! You were the first to leave the carriage, and you are the first to enter it, as if it were your own." "My dear madam," said one of the young Pelletiers, "you must not scold Charles. He is the head of our class, and must have the first place every where by right."

After perfecting himself in the study of letters and philosophy, Rollin dedicated three years to the study of theology at the college of the Sorbonne, and thus added strength to the devotional feelings for which he was always remarkable, although he did not enter the priesthood. He was not long, however, in attaining a fitting position in life. In the same college in which he had been brought up on charity, a professorship fell vacant when he had reached the age of twenty-two, and the retiring professor pointed him out as a fit successor to himself. Rollin received this appointment in the year 1683, and held it till 1687, when he was removed to the chair of rhetoric. In the succeeding year, he was raised to one of the highest literary professorships in

France, being nominated to the chair of eloquence in the Royal College.

This lofty position, to which the son of the humble cutler's widow had attained solely by the display of merit and industry, was not disgraced by its new possessor. Rollin consecrated himself to the youth of his country; they became his family, his glory, his pride. The duties of his office did not bound his exertions in their favour. He was an universal teacher; and as he himself had been first aided by the accidental notice of the good Benedictine, so did he become in turn the liberal patron of struggling talent. The university with which he was connected owed to him many salutary reforms, among the most important of which may be ranked his revival of the use of the French tongue in the colleges, where it had fallen almost into desuetude, to the great discouragement of native literature. Rollin, in his prelections, displayed the beauty of the masterpieces of eloquence and poesy in the maternal language, and thus did a service to his country, which was powerfully and beneficially felt in the labours of the ensuing generation. The taste for Greek, also, had become almost obsolete, when Rollin lent his aid in reviving the study of the tongue. He had an opportunity of introducing many more reforms into the collegiate system, when he was appointed rector of his university, which took place in 1694. This elevation, an extraordinary one for a young man of thirty-three years of age, shows the eminence to which he had arrived in the estimation of the public and his brethren.

While actively fulfilling his rectorial duties, visiting colleges, and instituting reforms that were long felt in France, Rollin, from this time forward, began to devote much of his life to study. "Watching by day with paternal care over the youth of France committed to his charge, he spent his nights," says a French author, "in writing works for them. And what works! At once the most simple and the most learned, the most instructive and the most amusing, that ever, perhaps, were composed! In these books you have the thoughts and reflections of a great and enlightened mind, combined with all the fervour and energy of a good master, writing for his scholars." Allusion is here made to Rollin's Treatise on Education, and to his historical works; but it is proper to observe that the first of his productions did not appear till 1715, previous to which time the subject of our memoir had for a number of years filled another important situation connected with the instruction of youth, in addition to those already held by him. He was appointed colleague to another man of learning in the principalship of the college of Beauvais. This appointment but extended the sphere of Rollin's exertions, and consequently of his utility. It was in 1715 that Rollin's first published work of any consequence, an edition of Quinctilian, with a valuable preface and notes, came from the press. In the same year, he was selected by the Royal College to draw up a reply to the Regent of France, in acknowledgment of favours received by the college at the hands of the regency. The discourse pronounced by the subject of our memoir on this occasion, was some time afterwards thrown into an extended form, and published under the title of a Treatise on Education or study. This work contained the fruits of his experience in teaching, and was highly praised. One attack, indeed, was made upon its doctrines; but the objections were soon forgotten, and would not have been mentioned here but for the honourable fact that Rollin, when the author of that critique was disgraced by the court, made him an offer of his purse and every possible assistance in that season of adversity.

The great work on Ancient History, which is to this day perused by almost every adult who can read, came next from the pen of Rollin. It appeared originally in thirteen volumes, all of which were given to the world between the years 1730 and 1738. Few works have obtained a more extensive reputation than this, which filled up a great gap existing up to that period in historical literature, and filled it up in such a way that it remains till this hour the standard work on the subject. Considering the immense amount of learning, labour, and research, requisite for the production of a view of the whole world's history, during a period of four thousand years, we must allow, that, had Rollin done nothing but this in his entire life, his claim on the gratitude of mankind would have been strong and incontrovertible. The Ancient History spread rapidly over Europe, and several foreign princes expressed their thanks in a direct manner to the author. Among others, Frederick the Great, then prince-royal of Prussia, entered into correspondence with Rollin. This epistolary intercourse continued until Frederick ascended the throne, when Rollin closed it in a manner characteristically delicate and modest. "I respect too much," said he, "the great duties of a sovereign to his people, to intrude, as heretofore, on your majesty's time, and will confine in future the expression of my profound respect to the transmission of my humble works." In France, the History of Rollin has ever been a subject of pride, both to the writer's contemporaries and to the succeeding generation. Alluding to the uncommon purity of his language, and the general charm of his style, Montesquieu called Rollin "the bee of France;" and Chateaubriand has warmly praised him, for the virtuous spirit which pervades the work from its commencement to the close. Most impartial persons at the present day, however, will be inclined to admit, that the devotional spirit of Rollin has led him to moralise much more largely and more frequently than was consistent with the nature of his task, or was likely to be beneficial.

Soon after the publication of his Ancient History, Rollin resolved to prepare a work on the History of Rome; but he had only finished the first five books, when his death took place (September 3, 1741), to the universal regret of the world of letters, which had fondly hoped that he would live to perfect his historical epitome. The minor works of Rollin were afterwards published, consisting of Letters, Discourses in Latin and French, and Poetical Pieces in Latin. We have now enumerated all the printed works of Rollin. If some readers be inclined to think their amount trifling, let these individuals turn to Gibbon and other historians, and they will at once discover the cause to lie in the vastness of the toil and research requisite to produce great *original* works of a historical nature, where the consultation and comparison of authorities are tasks for a lifetime.

In his private character as a man, Rollin was the same simple earnest being that he was in boyhood. His humble origin he never forgot, and this led him incessantly to seek out the poor and friendless lovers of learning, and to help them onwards on their path. His frugality gave him the means of doing this, although his disinterested desire for the advancement of learning induced him to refrain from taking even the just emoluments of his various offices, and kept his income always on a low scale. He would not even appropriate any of the profits derived from the sale of his works, but, on the contrary, entered into one sole condition with his publisher, that the latter should permit the author to reimburse him in full, if the productions were unsuccessful—thus binding himself to take all the risk, while he would take none of the profits. This excessive self-denial exhibited itself in all points of his domestic economy. In his little house on the summit of Mount St Genevieve, he employed till the day of his death the same furniture which had been used by his mother. The principal of the university sat upon the same chair which had served the poor cutler's son. In his small garden, planted with cabbage, Rollin received the visits of the greatest men of the day, statesmen, warriors, nobles, and philosophers, the poets Boileau and Racine, Rousseau, and other illustrious names. Loaded with testimonies of esteem and love from such men as these, and enjoying a calm cheerfulness of spirits that flowed from a pure conscience, Rollin, at the age of eighty, sank gently into the tomb. The house where he lived so long, and which was honoured by the presence of so many famous personages, is now, as a recent French writer tells us, the residence of a gardener; and the room which was the study of Rollin, and where he composed his great historical work, is at this moment a stable. "But what of this?" says the narrator of these facts; "the glory of the man is not confined within four walls; it has the world for a dwelling, men for its judges, and all ages to bestow on it the meed of applause!"

CONSUMPTION OF TOBACCO IN THE UNITED STATES.

It appears, from official documents published by the government of the United States, that a surprising increase of the use of tobacco has taken place in that country, and that the annual consumption now amounts to upwards of one hundred millions of pounds. Estimating the population of that country at 14,300,000, which is near the truth, this will give seven pounds for every man, woman, and child. The sum annually paid by the consumers of this quantity of tobacco in its manufactured state, has been computed, by a writer in the Portsmouth Journal, an American paper, at twenty millions of dollars.

The following passage is extracted from Dr Mussey's Essay on the Influence of Tobacco on Life and Health:—"Eighty thousand dollars' worth of cigars, it was estimated, were consumed in the city of New York in 1810; at that rate the present annual consumption would amount to more than 200,000 dollars. Dr Abbot, in his 'Letters from Cuba,' in 1828, states that the consumption of tobacco in that island is immense. The Rev. Mr Ingersoll, who passed the winter of 1832-3 in Havana (the capital of Cuba), expresses his belief that this is not an over-statement. He says, 'Call the population 120,000; say one-half are smokers; this, at a bit (that is, 12½ cents) a-day, would make between 7000 and 8000 dollars. But this is too low an estimate, since not men only, but women and children, smoke, and many at a large expense.' He says that 'the free negro of Cuba appropriates a bit, or 12½ cents, of his daily wages, to increase the cloud of smoke that rises from the city and the country.' This, in thirty years, would amount to 7058 dollars, a respectable estate for a negro, or even a white man.

The Rev. O. Fowler, from considerable attention to the statistics of tobacco consumption in the United States, estimates the annual cost at 10,000,000 dollars; time lost by the use of it, at 12,000,000 dollars; and pauper tax which it occasions, at 3,000,000 dollars.

This estimate I believe to be considerably below the truth. It has been calculated that the consumption of tobacco in this country (United States) is *eight times* as great as in France, and *three times* as great as in England, in proportion to the population."

So far Dr Mussey goes; but the editor of the New York Commercial Advertiser goes much farther. He says that about one-third of the whole population, that is, 100,000 citizens of New York, are smokers; and that the average cost to each smoker is computed to be ten cents per day; the total daily cost is therefore 10,000 dollars, and the total annual cost 3,650,000 dollars. The annual cost of bread for the inhabitants of the city, allowing thirteen ounces of that necessary commodity for each person per day, computing flour at ten dollars per barrel, would amount to 3,493,050 dollars per annum. "Thus," says he, "a little attention to the subject discloses the painful and disgusting fact, that, in the clear-headed, sharp-sighted, money-making city of New York, the inhabitants pay more for tobacco than they do for bread." The estimate of this writer is undoubtedly an exaggeration; but taking all the foregoing statements together, they sufficiently prove that the use of tobacco in the United States is carried to a most irrational excess.

DOSING AND DRUGGING.

Many seem to suppose that the occasional use of medicine, even in large doses, as an emetic or a cathartic, cannot do much harm. Nay, some suppose we are the better for it afterwards; that health and long life are promoted by it. And as for small doses, taken day after day, as small doses of picra, or bitters, or sulphur, or Dover's powders, or ipecac, these cannot possibly do any harm!

Such views as these are mistaken ones, and they produce a great deal of mischief. The occasional swallowing of emetics and cathartics is hurtful enough; perhaps much more so than any body has as yet supposed. Those who are enslaved to their use—whether yearly, quarterly, or monthly—seldom if ever enjoy any thing like perfect health. Such dosing is at best a short and lazy way of doing that which ought to be done more slowly, by means of proper exercise, cleanliness, temperance, &c. People who resort to it may tell us, as many do, how healthy they are, especially soon after the dosing is over; but they are apt soon to be ill again. And when so, there is usually a stronger demand for a second dose than there was for the first. The truth is, that though the system, like a bow which has been long bent, has a tendency to react after the oppression of a strong and powerful dose of medicine is over, there is seldom any permanent good done. There is indeed present relief; but unless the medicine has been used with great skill and care, and is followed up by other health-restoring measures, as proper air and diet, and cheerful exercise, the system is probably injured rather than benefited.

And yet, how great soever may be the injury done by occasional large doses of medicine, the evil tendency of small doses, habitually taken, is incomparably greater. We believe, most fully, that small doses of medicine—of every kind which irritates or poisons—affect the constitution much more, *in proportion to their quality*, than large ones. We will give, in as few words as possible, our reasons.

When a large dose of medicine, say a pint of brandy, or twenty grains of calomel, is taken into the stomach, it usually meets with so much resistance, that it is speedily thrown off, either by vomiting or otherwise. The whole vital domain—all the vital organs, we mean—as if aware of its danger, seems to brace itself against it; and if only a part of it finds its way into the circulation, there is such a terrible commotion produced within, that it is very soon ejected from the system, at least the greater part of it. Whereas, when we divide either of these quantities—say the calomel—into twenty doses or portions, and only take two of these small doses a-day, it will not usually require the whole of the twenty grains to poison the system very effectually. That troublesome affection called ptyalism, or salivation, will probably manifest itself long before ten days have passed away.

So is it in regard to the exhibition of most other active medicines. If the object be to make a local or transient, rather than a general or permanent impression on the system, single large doses are administered; but if, on the contrary, our object is to affect, that is, poison the system, single large doses are administered regularly and daily. In the latter case, they seem to find their way unperceived into the circulation, and into every nook and corner of the system, bringing it by stealth, as it were, under their influence.

And those persons who use large doses of alcohol, or powerful emetics, cathartics, &c., only once a-month, once in two months, or once in a quarter, and abstain from them entirely the rest of the time, though they unquestionably thereby shorten their lives, will greatly out-last those who take small doses daily, even if the aggregate of those small doses should not half equal that of the large ones. We might cite particular cases in proof of this point, but the world is full of them. Besides, the principle we are here laying down will come up again presently.

If what we have said thus far is true—if all medicine, even when given by the physician, if not given with the utmost skill and caution, should be regarded as shortening life—if the daily habit of dosing is so pernicious, and especially if the smaller the dose the greater the injury, in proportion to its quantity, how careful ought we to be to take no medicine except when driven to the absolute necessity of doing so, and only by and with the advice of the most skilful physician! Should there remain any doubt on this point, we think it will be the following consideration.

The daily use of medicinal substances is usually attended with a production of many serious evils.

1. The taking of one dose makes the way to another more easy. He who has found temporary relief from pain in the use of a dose of laudanum to-day, will be very likely, on the recurrence of similar feelings, to take another dose, especially if he has it at hand. The third dose will be taken still more readily, the fourth more so still, and so on. Again, what cures repeated returns of colic, or any other complaint, will be used by and bye for relief in other complaints; and what cures a

more severe pain to-day, will of course be expected to cure one less severe to-morrow. Further still, what cures all sorts of disease so well after it has actually arisen, will be confided in, ere long, to prevent it.

But as one dose taken to prevent pain is likely to awaken troublesome feelings at some future time, nothing is more probable than that he who has once begun the habit of dosing and drugging will at length become confirmed in it. It is in vain to tell the person who has acquired the habit of dosing, that this is the fact, that every dose of every medicinal substance he takes, from the weakest herb tea to opium or prussic acid, though it relieves present pain, by benumbing the nerves or otherwise, only increases the severity of future attacks. He cannot, he will not believe you. He is cured for the present, and that is enough for him.

2. The daily use of medicine, in small doses, not only aggravates the complaints for which it is taken, but also invites new diseases. It is in the system, especially in the fluids, almost like leaven in the mass with which we are accustomed to incorporate it. It is, at least, like seed sown on a prepared soil, ready to spring up and bring forth, in new complaints, some thirty, some sixty, and some a hundred fold.

3. The daily use of medicine of every kind, and in every degree, not only tends to form and fix the habit of dosing, to invite diseases, and to aggravate those which are induced by other causes, but it also puts the system in such a condition that we shall hardly be apt to receive benefit from the administration of medicine when we are really sick, and its use seems fairly indicated.—*From an American publication entitled "The Library of Health."*

THE WALTZING BEAR.

In the end of the year 1837, a scene took place at Czerny in Bohemia, which might be remembered with advantage at this particular period in Britain, where there is a growing passion for the exhibition of wild beasts on public stages. A Bohemian manager of a theatre having heard of the immense success attending representations where real dogs, elephants, monkeys, &c. were introduced, bethought himself of trying to turn a bear to account in his own dramatic temple. Accordingly, he got his literary assistant to compose a little melodrame, in which all was made subservient to the operations of a trained bear, which the manager had got hold of. The plot ran thus:—A dethroned king having fled to the mountains, fell in with a bear that had been wounded by the hunters. Androcles-like, the monarch relieved the bear of its pain, and thus acquired its warmest gratitude. The feats of agility performed by the bear, several dances by him and by savages, or rather peasants, with a due allowance of thunder and particoloured flames, formed the leading attractions of the piece. It was beyond measure successful. Every body admired the docility of Bruin, his agility in climbing, and his grace in a closing waltz with a young peasant girl. After a run of several nights, however, the bear seemed on one evening disinclined to his work. The *star* of the night—Ursa Major—appeared desirous to withdraw its light. But by dint of energetic remonstrances at the side-scenes, he was got to move on till the appointed time for the waltz. He stood up with his fair partner, and began to advance and retreat very elegantly. The audience were in raptures. They stood up on the seats to see more perfectly. All at once a shriek burst from the stage. All who were upon it fled, and the first to be off was the partner of the bear. The spectators were not alarmed at first at this, thinking it a part of the usual performance; but they speedily saw their error when the bear turned round and moved forward to the front of the stage, with the *muzzle*, which formed the wonted protection against his freaks, hanging loose from his neck! Off went the musicians in one instant, and off the shrieking audience tried to go also. The crush was terrible. Many were trampled down and seriously hurt. At length all the lower part of the theatre was cleared without any injury inflicted by Bruin, who continued, meanwhile, to the unspeakable horror of those who were hindmost in the crush, to cross from the stage to the pit benches. There he lay quietly down to sleep, and there he was quietly muzzled some time afterwards by his keepers.

On account of the alarm and contusions received on this occasion, the authorities interfered, and the Great Bear never starred it again in the theatre of Czerny.—*French newspaper.*

BREAKING A BUTTERFLY UPON THE WHEEL.

In the republic of Quito, and some other parts of South America, there is a small insect called the *comejen*, whose destructive qualities are so active, that in the space of one night it will penetrate the hardest wood, or any other similar substance. In that short period it has been known to penetrate, through and through, a bale of paper containing sixteen reams. The insect builds its nest under the eaves of the houses, of a glutinous clay, similar to that used by the swallows in the fabrication of their nests; but the comejen continues his for several yards in length. The natives sometimes daub their nests with tar, which is sufficient to disperse the whole swarm; for, if disturbed, they will divide into different societies, and each will separately search for a convenient place in which to form a settlement.

In the archives of Quito there is a curious royal decree of Carlos III. respecting this insect. A number of cases of gun-flints had been sent to Panama from Spain, for the purpose of being forwarded to Lima; but their non-arrival at this place caused the viceroy to repeat his request to the court for the necessary supply. This gave rise to an investigation—the flints were traced to Panama, and the governor was ordered to account for them. In his answer to the minister he stated that the comejen had destroyed the cases in the royal magazine. The minister being ignorant of what the comejen was, an order was issued under the royal seal, commanding the governor of Panama to apprehend the comejen, to form a summary process on the crimes which he had committed, then to send the prisoner and documents, with the necessary guard, in custody to Spain, that he might be dealt with according to the extent of his criminality!

THE DYING STUDENT.

A sickening weight is on my heart—I feel
The current of my life is ebbing fast.
Hark! from the minster comes its midnight peal—
When next it sounds, my sorrows shall have past!
The chillness of the grave already clings
About my limbs, and uncouth shapes of fear
Throng up around me, and on ebon wings
Death's dull-eyed king himself is hovering near.

Was it for this I curbed the lightsome play
Of youth's high passions, its unburdened mind?
Was it for this I flung its joys away,
And with the throes of wild ambition pined?
Why did I learning's volumed stores unclasp,
Why with rack'd brow pursue the chase for truth,
To see it ever fly my toilsome grasp,
Myself grown old amidst my wreck of youth?

A creeping stillness fills my lonely room,
No voice, no hand its palm in mine to place!
Vainly I strive amid the deepening gloom
To catch the light of one familiar face.
Visions there are, that hover by my side,
Strewing my restless pillow with annoy,
My father weeping for his hope, his pride,
My mother wailing for her dark-haired boy.

My sister, my sweet sister's clear glad voice,
As last I heard it fill the sunny air,
Is sounding near—and she, my bosom's choice,
The hallowed idol of my soul, is there.
And yet, mayhap, this very hour, her heart
Bounds to the music of its own delight,
Framing new joys in which I bear a part,
Joys all, alas, too fair and overbright!

Oh, might I dream away into my rest,
Might lay my fevered temples all thrown bare
To sleep upon her gently heaving breast,
And shade them with her folds of clustering hair!
To feel her arms about my neck, her kiss
Warming my clay-cold cheek; to catch her breath
Whispering kind words, meet for a time like this,
Might scare the horror of this drowsy death.

But I am here alone—all, all alone,
None near that loves me, none that I can prize;
Strange voices o'er my tuneless sleep shall moan,
And strangers' loveless hands shall close mine eyes.
How drear and dark it grows! My faithful lamp
Burn yet a little while: 'twill soon be o'er—
What means this shuddering dread, these dews so damp,
This chill all here about my heart! No more!——

STATISTICS.

The following whimsical answers are said to have been returned to a set of queries recently issued under a Commission of Inquiry in Ireland:—

Qu.—How many labourers are there in your parish; how many in constant, how many in occasional employment; how are they maintained when out of employment?

Those who can get work, will work if they can,
Those who can't, beg or steal—that, sir, is the plan.

What is the ordinary diet, and condition with respect to clothing, of the labouring classes?

The general diet is potatoes and *point*,
For seldom, if ever, they see any joint.
Their clothing is various, as every fool knows,
Some decent, some ragged, without any hose.

At what periods of the year are they least employed?

What tiresome questions! if ever I knew
Such a big set of asses! Why, when they have nothing to do!

What, on the whole, might an average labourer, obtaining an average amount of employment, earn in the year?

Do you think with such questions my mind I'd perplex,
Or trouble my head, or my intellect vex.
For an *average man*—was there ever such stuff?—
An average nothing, would be full enough.

What would be the yearly expense of food for an able-bodied labourer in full work?

And now for this question! to answer it right,
I will send you a man with a fair appetite:
You can feed him a quarter, and judge pretty near
What would be a just average during the year.

Of what class of persons generally are the landlords of cottages or cabins?

Some taller, some shorter, some black, brown, or fair;
Some squint-eyed, some crook-nosed, and some very *quare*.

What is the usual rent of cabins with and without land?

From one to two pounds they will *promise* to pay,
But the landlord is glad, after two years, to say,
"I'll forgive you the *rint*, if you'll give up the *kay*."
He then gets another: *who acts the same way.*

Of what description of buildings are those cabins, and how furnished? Are they supplied with bedsteads and comfortable bedding?

A cabin consists of the walls, roof, and floor,
With *sometimes* a window, and mostly a door.
Their beds are of straw, and instead of a rug,
"A slip of a pig" just keeps their feet snug.

Upon what terms are *herds* usually hired in your parish?

No flocks in the field, and no herd in the stall,
For *herdsmen* there surely can be little call.

—*Athenæum.*

A MARTYR TO SCIENCE.

After Franklin made his great discovery of the identity of lightning and electricity, by means of a kite sent up into the air during a thunder-storm, many philosophers eagerly sought to repeat his experiments. Amongst these Professor Richman of St Petersburgh was the most indefatigable and fearless. In pursuing a series of experiments on atmospheric electricity, he erected what was called a gnomon, which consisted principally of a Leyden jar, communicating with an iron rod, which rose some feet above the roof of his house; and an electrometer, consisting of a linen thread with half a grain of lead tied to it. Of course, when the gnomon was charged with electricity, and had communicated that fluid to the thread and the metal, the latter, being easily moved, would be repelled from the gnomon; and its angular ascent on the face of a divided quadrant or index indicated the force of the electricity which had been accumulated. On the 9th of August 1752, Richman obtained from the end of the rod electrical flashes, which could be heard at several feet distant; and if any person touched the apparatus, a smart shock was felt.

On the 6th of August 1753, the professor, whilst at a meeting of the Academy of Sciences, heard the sounds of distant thunder; and having previously made every arrangement for making experiments, he instantly quitted the assembly, taking with him his engineer, Mr Sokolow, to make draughts of whatever might appear interesting in the phenomena. On their arrival at Richman's house, the plummet of the electrometer was found elevated four degrees from the perpendicular; in other words, the electricity in the gnomon had accumulated to such an extent, that it repelled the lead to the distance mentioned. Whilst the philosopher was in the act of describing to his companion the dangerous consequences which might follow if the thread rose to forty-five degrees, a tremendous crash of thunder shook the imperial city. He bent his head over the gnomon to observe the indications of the electrometer, and in this position, with his head a foot from the iron rod, a globe of bluish-white fire, about the size of Mr Sokolow's fist, shot from the iron rod to the professor's head, accompanied by a report as loud as that of a pistol. The discharge proved fatal; he fell back on a chest, and expired in a moment. Sokolow was stupified and benumbed by a kind of vapour which had been generated, and his clothes were covered with burnt marks produced by the red-hot fragments of a metallic wire which had struck his person. On recovering himself, he rushed out of the house, and made known the terrible disaster which had taken place. In the meanwhile, Madam Richman, alarmed by the thunder-stroke, hastened to the chamber, and found her lifeless husband in the attitude of sitting upon the chest, and leaning against the wall.

The medical part of the case is not without interest. Aid was of course instantly obtained; a vein was opened, but no blood flowed from it; and although every attempt was made to restore life by violent friction and other means, all was in vain. When the body was turned, a small quantity of blood dropped from the mouth, and from a red spot which marked the forehead a few drops also oozed out. Several red and blue spots, not unlike leather shrunk by burning, were discovered on different parts of the body. The shoe of the left foot was burst open, and a blue mark appeared on the foot beneath the aperture. The stocking exhibited no corresponding hole, and the coat had been uninjured. On opening the body, neither the brain nor the cranium showed any appearance of injury; a little blood appeared in the cavities below the lungs, and in the lungs towards the back, which were of a dark-brown colour. The heart-glands and smaller intestines were all inflamed, but the entrails were of the natural appearance. Some silver in one of the pockets remained uninjured by the electric fluid. Immediately after the fatal explosion, the house was filled with a sulphureous vapour. A clock was stopped in the adjoining room; the ashes of the hearth were strewed about; the doorcase of the room was rent asunder, and a part of the door itself was torn off. The Leyden jar was shivered, and its metallic filings were scattered about the apartment.

PUNCTUALTY OF WASHINGTON.

When Washington appointed noon as the hour at which he should meet Congress, he never failed to be passing the threshold of the hall just as the clock was striking twelve. Whether his guests were present or not, he always commenced dinner exactly at four. Not unfrequently, new members of Congress, who were invited to dine with him, delayed until the meal was half over; and he would then remark, "Gentlemen, we are punctual here. My cook never asks whether the company has arrived, but whether the hour has." When he visited Boston in 1789, he appointed eight A.M. as the hour when he should set out for Salem (a town of Massachusetts); and while the old south clock was striking eight, he was in the act of mounting his horse. The company of cavalry which volunteered to escort him, were parading in a neighbouring street after his departure, and it was not till the general reached a place at several miles' distance that they overtook him. On the arrival of the corps, Washington in a perfectly good-humoured manner observed, "Major ——, I thought you had been too long in my family not to know when it was eight o'clock." Captain Pease, the originator of the stage establishment in the United States, had a beautiful pair of horses which he wished to dispose of to the general, whom he knew to be an excellent judge of horses. The general appointed five o'clock in the morning to examine them. But the captain did not arrive with the horses until a quarter past five, when he was informed by the groom that the general had been there at five, and was now busy fulfilling other engagements. Pease, much mortified, was obliged to wait a week for another opportunity, merely from having delayed the first quarter of an hour.

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